

IN THE CLAIMS:

1. (Previously Presented) A dilution and dispersion device for exhaust gases from a vehicle engine, comprising:

a hub, within an exhaust channel, and having at least one opening therein for permitting substantially unidirectional flow of exhaust gases through the dilution and dispersion device,

a ring encircling said hub and freely rotatable with respect to said hub, and

blades fixed to said ring, for radially dispersing exhaust gases, such that the blades mix output flows of gases through said opening and said blades to dilute a temperature profile of such exhaust gases.

2. (Cancelled)

3. (Previously Presented) A dilution and dispersion device according to Claim 1, wherein a number of said at least one opening, a diameter of said at least one opening, and an arrangement of said at least one opening, correspond to a predetermined permeability level of said device.

4. (Previously Presented) A dilution and dispersion device according to Claim 1, wherein said hub comprises a profiled element for deflecting gases towards said blades.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Previously Presented) The dilution and dispersion device according to claim 1, wherein the device is non-motorized.

9. (Previously Presented) An exhaust system comprising:

an exhaust channel for emitting exhaust gases, and

a dilution and dispersion device mounted to an end of said channel so that any exhaust gas emitted from said channel must pass through said dilution and dispersion device, said dilution and dispersion device comprising:

a hub which includes at least one hole for permitting a substantially unidirectional flow of exhaust gases therethrough;

a ring attached to and encircling said hub and freely rotatable with respect to said hub, and

a plurality of blades attached to said ring, said blades for dispersing a flow of exhaust gases passing through said blades, thereby mixing the dispersional and unidirectional flows of gases to dilute a temperature profile of such exhaust gases.